AMENDMENT AND RESPONSE

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Serial No.: 09/183,715

Filing Date: October 30, 1998

Attorney Docket No. 100.104US01

Title: USING ALTERNATE POLARIZATION IN FIXED WIRELESS SYSTEM DEPLOYMENT FOR

IMPROVED CAPACITY

## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

## Listing of claims:

Claims 1-69 (cancelled)

## 70. (New) A communication system comprising:

a plurality of communication circuits disposed to divide a region into communication areas:

wherein each communication area is divided into at least a first portion and a second portion;

wherein each communication circuit communicates using a first polarization in the first portion of its communication area and communicates using a second polarization in the second portion of its communication area;

wherein adjacent first portions of communication areas for the plurality of communication circuits use the same polarization to form substantially linear communication regions of the same polarization;

wherein each communication area is further divided into at least a first sector and a second sector;

wherein the communication circuit communicates using a first subband within a particular frequency spectrum in the first sector and the communication circuit communicates using a second subband within a particular frequency spectrum in the second sector;

wherein the division of each communication area into at least the first portion and second portion is independent of the division of each communication area into at least the first sector and second sector.

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71. (New) The communication system of claim 70, wherein each communication area is divided into a first sector, a second sector, a third sector, and a fourth sector;

wherein the communication circuit communicates using a first subband within a particular frequency spectrum in the first sector and second sector, and the communication circuit communicates using a second subband within a particular frequency spectrum in the third sector and fourth sector.

- 72. (New) The communication system of claim 70, wherein the first polarization comprises horizontal polarization and the second polarization comprises vertical polarization.
- 73. (New) The communication system of claim 70, wherein each of the first portion and second portion of each communication area comprises approximately one half of the communication area.
- 74. (New) The communication system of claim 70, wherein each communication circuit transmits and receives signals using at least a first and second polarization, and at least a first and second subband of a frequency spectrum.
- 75. (New) A method for communication comprising:

dividing a region into a plurality of communication areas, each communication area including a communication circuit;

dividing each of the plurality of communication areas into at least a first communication area portion and a second communication area portion and into at least a first communication area sector and a second communication area sector,

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wherein the division into the first communication area portion and second communication area portion is independent of the division into the first communication area sector and second communication area sector;

communicating using a first polarization in the first communication area portion, a second polarization in the second communication area portion, a first subband of a frequency spectrum in the first communication area sector and a second subband of a frequency spectrum in the second communication area sector;

wherein adjacent first communication area portions for a plurality of communication circuits use the same polarization to form a region of belts having the same polarization.

- 76. (New) The method of claim 75, wherein communicating includes using the same polarization for signals in adjacent communication areas.
- 77. (New) The method of claim 75, wherein the first polarization comprises horizontal polarization and the second polarization comprises vertical polarization.
- 78. (New) The method of claim 75, wherein the first communication area portion and second communication area portion of each communication area comprises approximately one half of the communication area.
- 79. (New) The method of claim 75, wherein communicating comprises transmitting and receiving.